

Novice magic of Brett Nortje - foundations of magic.

Understanding particles in physics.

Previously, on other sites, i have mastered my new understanding of electrons and photons. Electrons are essential for bonding and energy, and photons are essential for 'closed circuit' regenerating things like light. okay, i cannot really remember my new definition of photons, as i didn't really like what i found, but, it is now time to focus on something else.

Chemistry is the study of things that are in the elemental table and combinations of particles studied in physics, so, physics will set you up for chemistry, but chemistry might only give you a very basic understanding of physics - chemistry big, physics small. there is much less to learn in physics than chemistry too.

Let us take a look at quarks? i have no idea where to start, so i will start with a quote;

💬 Originally Posted

by http://en.wikipedia.org/wiki/List_of_particles

Fermions are one of the two fundamental classes of particles, the other being bosons. Fermion particles are described by Fermi-Dirac statistics and have quantum numbers described by the Pauli exclusion principle. They include the quarks and leptons, as well as any composite particles consisting of an odd number of these, such as all baryons and many atoms and nuclei.

Fermions have half-integer spin; for all known elementary fermions this is $1/2$. All known fermions are also Dirac fermions; that is, each known fermion has its own distinct antiparticle. It is not known whether the neutrino is a Dirac fermion or a Majorana fermion.[3] Fermions are the basic building blocks of all matter. They are classified according to whether they interact via the color force or not. In the Standard Model, there are 12 types of elementary fermions: six quarks and six leptons.

💬 Originally Posted

by http://en.wikipedia.org/wiki/List_of_particles

Quarks are the fundamental constituents of hadrons and interact via the strong interaction. Quarks are the only known carriers of fractional charge, but because they combine in groups of three (baryons) or in groups of two with antiquarks (mesons), only integer charge is observed in nature. Their respective antiparticles are the antiquarks

which are identical except for the fact that they carry the opposite electric charge (for example the up quark carries charge $+\frac{2}{3}$, while the up antiquark carries charge $-\frac{2}{3}$), color charge, and baryon number. There are six flavors of quarks; the three positively charged quarks are called up-type quarks and the three negatively charged quarks are called down-type quarks.

So, fermions are broken down into quarks and leptons. these two types of particle are there for the sake of motion and energy, as, we all know it takes energy to move, and energy eventually results in movement. this is like pulling a elastic back, there is now created energy from you to the band, and then you release your energy holding it back to fire it across the room. this is where you exert energy to move it, then you release it's own energy to move it.

I have already covered the formula for finding the weights and spins of these things on another forum, not that it really matters if you learn them like a doctor learns things out their textbooks - there is a lot of content in there!

💬 Originally Posted

by **http://en.wikipedia.org/wiki/List_of_particles**

Leptons do not interact via the strong interaction. Their respective antiparticles are the antileptons which are identical except for the fact that they carry the opposite electric charge and lepton number. The antiparticle of the electron is the antielectron, which is nearly always called positron for historical reasons. There are six leptons in total; the three charged leptons are called electron-like leptons, while the neutral leptons are called neutrinos. Neutrinos are known to oscillate, so that neutrinos of definite flavour do not have definite mass, rather they exist in a superposition of mass eigenstates. The hypothetical heavy right-handed neutrino, called a sterile neutrino, has been left off the list.

It is apparent that energy used to charge the electron comes from the quarks, as the electrons have a negative charge number, meaning they are basically ruled out of motion or anything else - they are useless without the quarks. leptons are important because the electron dictates how heavy and dense something is, as, with my formulas, you will find that the more electron orbital

clouds it has, the more this is true. it is true that there is no strong interaction between leptons, because the quarks do all the work. this means that electrons bond things together by being 'lazy' and hauling things 'knitted closed,' like a cat dragging a rug under them when you are trying to take them to the vet!

Bosons.

Bosons are one of the two fundamental classes of particles, the other being fermions. Bosons are characterized by Bose-Einstein statistics and all have integer spins. Bosons may be either elementary, like photons and gluons, or composite, like mesons.

The fundamental forces of nature are mediated by gauge bosons, and mass is believed to be created by the Higgs Field. According to the Standard Model the elementary bosons are:

Photon, w boson, z boson, gluon, Higgs boson and graviton. i think the last two do not fit into my idea of what goes on in the world, so, let me first try to nullify or get rid of them before we continue. the Higgs is supposed to give things mass, but, so is the graviton. there is no mass outside of the electron's orbital clouds and they make things denser and heavier and sometimes 'harder.' this means these things do not matter. as for photons, i have covered them on online debate network.

So, the w boson, the z boson and the gluon;

💡 Originally Posted
by <http://en.wikipedia.org/wiki/Boson>

In quantum mechanics, a boson (ⁱ/ˈboʊsɒn/,^[1] ⁱ/ˈboʊzɒn/^[2]) is a particle that follows Bose-Einstein statistics. Bosons make up one of the two classes of particles, the other being fermions.^[3] The name boson was coined by Paul Dirac^[4] to commemorate the contribution of the Indian physicist Satyendra Nath Bose^[5]^[6] in developing, with Einstein, Bose-Einstein statistics—which theorizes the characteristics of elementary particles.^[7] Examples of bosons include fundamental particles such as photons, gluons, and W and Z bosons (the four force-carrying gauge bosons of the

Standard Model), the Higgs boson, and the still-theoretical graviton of quantum gravity; composite particles (e.g. mesons and stable nuclei of even mass number such as deuterium (with one proton and one neutron, mass number = 2), helium-4, or lead-208[Note 1]); and some quasiparticles (e.g. Cooper pairs, plasmons, and phonons). [8]:130

An important characteristic of bosons is that their statistics do not restrict the number of them that occupy the same quantum state. This property is exemplified by helium-4 when it is cooled to become a superfluid.[9] Unlike bosons, two fermions cannot occupy the same quantum space. Whereas the elementary particles that make up matter (i.e. leptons and quarks) are fermions, the elementary bosons are force carriers that function as the 'glue' holding matter together.[10] This property holds for all particles with integer spin ($s = 0, 1, 2$ etc.) as a consequence of the spin-statistics theorem.

So, they can occupy the same place? this means they must merge, but, there must be a limit to the amount of times it can run over? i would say that they are like a puddle of water, where it occupies the same space, but the space grows bigger, yes? they are force carrying particles, like quarks, and have a zero charge as they are just inert mass or 'stuff waiting to be used.'

Gluons are like putty, they will hold together other elements, and are like the 'bonds' between elements and stuff, but, are much smaller and cannot exist without elements or atoms, but must exist when atoms combine, like the bosons will bind to other particles like quarks and electrons - the quarks give the power, the electron's give the 'focus,' objective or goals and the bosons give it 'substance' as to what it will do, maybe the elements will be included here in? all the while the gluons will hold the things together, like a skeleton.

More on leptons.

 Originally Posted

by http://en.wikipedia.org/wiki/Electron_neutrino

The electron neutrino (ν_e) is a subatomic lepton elementary particle which has no net electric charge. Together with the

electron it forms the first generation of leptons, hence its name electron neutrino. It was first hypothesized by Wolfgang Pauli in 1930, to account for missing momentum and missing energy in beta decay, and was discovered in 1956 by a team led by Clyde Cowan and Frederick Reines (see Cowan-Reines neutrino experiment).[1]

💬 Originally Posted

by http://en.wikipedia.org/wiki/Electron_neutrino

Like all particles, the electron neutrino has a corresponding antiparticle, the electron antineutrino ($\bar{\nu}_e$), which differs only in that some of its properties have equal magnitude but opposite sign. The process of beta decay produces both beta particles and electron antineutrinos. Wolfgang Pauli proposed the existence of these particles, in 1930, to ensure that beta decay conserved energy (the electrons in beta decay have a continuum of energies) and momentum (the momentum of the electron and recoil nucleus - in beta decay - do not add up to zero).

So, the neutrino sucks up energy for itself, like a fire would burn wood for itself. this means of course that it is 'active' in some way, as it is doing something, even though it is something bad.

💬 Originally Posted

by <http://en.wikipedia.org/wiki/Muon>

The muon (*/ˈmjuːɒn/*; from the Greek letter mu (μ) used to represent it) is an elementary particle similar to the electron, with unitary negative electric charge of -1 and a spin of $1/2$, but with a much greater mass ($105.7 \text{ MeV}/c^2$). It is classified as a lepton, together with the electron (mass $0.511 \text{ MeV}/c^2$), the tau (mass $1777.8 \text{ MeV}/c^2$), and the three neutrinos. As is the case with other leptons, the muon is not believed to have any sub-structure; namely, it is not thought to be composed of any simpler particles.

The muon is an unstable subatomic particle with a mean lifetime of $2.2 \mu\text{s}$. Among all known unstable subatomic particles, only the neutron and some atomic nuclei have a longer decay lifetime; others decay significantly faster. The decay of the muon (as well as of the neutron, the longest-lived unstable baryon), is mediated by the weak interaction exclusively. Muon decay always produces at least three particles, which must include an electron of the same charge as the muon and two neutrinos of different

types.

Like all elementary particles, the muon has a corresponding antiparticle of opposite charge (+1) but equal mass and spin: the antimuon (also called a positive muon). Muons are denoted by μ^- and antimuons by μ^+ . Muons were previously called mu mesons, but are not classified as mesons by modern particle physicists (see History), and that name is no longer used by the physics community.

Muons have a mass of 105.7 MeV/c², which is about 200 times that of the electron. Due to their greater mass, muons are not as sharply accelerated when they encounter electromagnetic fields, and do not emit as much bremsstrahlung (deceleration radiation). This allows muons of a given energy to penetrate far more deeply into matter than electrons, since the deceleration of electrons and muons is primarily due to energy loss by the bremsstrahlung mechanism. As an example, so-called "secondary muons", generated by cosmic rays hitting the atmosphere, can penetrate to the Earth's surface, and even into deep mines.

Because muons have a very large mass and energy compared with the decay energy of radioactivity, they are never produced by radioactive decay. They are, however, produced in copious amounts in high-energy interactions in normal matter, in certain particle accelerator experiments with hadrons, or naturally in cosmic ray interactions with matter. These interactions usually produce pi mesons initially, which most often decay to muons.

As with the case of the other charged leptons, the muon has an associated muon neutrino, denoted by ν_μ , which is not the same particle as the electron neutrino, and does not participate in the same nuclear reactions.

This is like a disease that sucks mass away from the rest of the atom, and is like a small black hole - could normal quasars be big muons?

💡 Originally Posted

by http://simple.wikipedia.org/wiki/Tau_lepton

Tau (τ) leptons (aka tauons, tau particle) are one of the

very small elementary particles. This means that they are believed to be so small that they can not be divided any more. Tau leptons can be thought of as very heavy electrons, as they are both leptons. This is because they have about 3,500 times as much mass as electrons, and about 17 times as much mass as muons. Since they only live for 2.9×10^{-13} seconds, they do not have a significant role in the regular world. However, they are very important in the decay of subatomic matter.

Like the other two basic leptons, tauons have a neutrino named after them (the tau neutrino).

Tau have a charge of -1, and can be written as τ^- . Since antimatter has the opposite of charge of regular matter, anti-tauons have a charge of +1, and can be written as τ^+ . Tauons themselves are unstable, and can decay. Also, τ^+ and τ^- can annihilate each other in a form of decay. When a single tauon decays, it is the only lepton that can decay into hadrons (things made of quarks). τ^+ and τ^- can be formed by an electron-positron (antielectron) pair combining. The two tauons then decay into an electron or a positron, a muon or an antimuon, and four of the various neutrinos. However, a single tauon decays differently than a tauon and an antitauon.

A τ^- will quickly decay into a tau neutrino and a W boson. The W boson will exist for 3×10^{-25} seconds, before it decays into an electron or an electron antineutrino, a muon or a muon antineutrino, and a down quark or an up antiquark.

As with the other leptons, these produce activity by sucking the substance from other things. this brings things closer together, like electron bonding.

Quarks.

In particle physics, the quark model is a classification scheme for hadrons in terms of their valence quarks—the quarks and antiquarks which give rise to the quantum numbers of the hadrons. The quark model underlies "flavor SU(3)", or the Eightfold Way, the successful classification scheme organizing the large number of lighter hadrons that

were being discovered starting in the 1950s and continuing through the 1960s. It received experimental verification beginning in the late 1960s and is a valid effective classification of them to date. The quark model was independently proposed by physicists Murray Gell-Mann,[1] and George Zweig[2][3] (also see [4]) in 1964. Today, the model has essentially been absorbed as a component of the established quantum field theory of strong and electroweak particle interactions, dubbed the Standard Model.

Okay, as I am sure you all know, quarks are very small. they are in the same size category as electrons, photons and neutrinos and so forth. these little things have a negative charge, so, will affect the other things around them by sucking them in or together, sort of like 'electron bonding.' they are usually found in "strange stars" and will not really travel as they are too busy sucking, yes? this means they just float along with the nucleus and tag along, sucking stuff in as they go.

[Honestly the only reason i am writing about this s to maximize my chances of flying or making other things fly.]

These are not strong interactions, because they have a 'negative third charge.' if you look to the positively charged quarks, then you will find polarizing energy. but, let's take a look at some of this funny stuff;

🗨 Originally Posted

by <http://en.wikipedia.org/wiki/Strangeness>

In particle physics, strangeness ("S") is a property of particles, expressed as a quantum number, for describing decay of particles in strong and electromagnetic reactions, which occur in a short period of time.

🗨 Originally Posted

by http://en.wikipedia.org/wiki/Electric_charge

An object is negatively charged if it has an excess of electrons, and is otherwise positively charged or uncharged.

So, quarks either suck or decay. all the energy comes from the protons, then, yes?

Electricity.

To sum it up, physics is about the physical universe that is very small. it is smaller than chemistry, and, is essential to engineers and other people that use technical things, as it helps find way to alter the building blocks of the world. physics has gluons that hold chemicals together, so it is essential for chemistry too. these do not mean you need to understand how they work to do these things, only a basic understanding of how machines work is required, as, only if you are trying to redefine the way things work will you need to understand these building blocks of 'life.'

If you were to have electricity, for example, you need to observe that the electrons - hence the word electricity - are negatively charged - they destroy things, or are destroyed. this 'power' will charge the appliance, like a fridge, and then get 'earthed.' before it is earthed, it will interfere with the way things work inside the fridge, and, will activate it's opposite, which it is attracted to, being excited as a fire is. then, it will stimulate the 'metal bits' as they conduct the path of the electrons, and, will see them 'ignite.' when you ignite a match, it burns the wood, but, these appliances are not made out of wood, although they will melt eventually.

So, it starts at a power plant, where some power is made out of electromagnetism, where they use opposing forces, much like fusion power, to send electrons through the 'wires.' then it gets to your home. the opposing forces are made out of heat, and the heat is like a fire, and i pointed out that electricity travels and resembles like a fire. the fire is where the current is, and this fire comes to heat your geyser, as a basic example.

Electronics advances.

This is where we create and analyze our own ideas in advancing electronic things, okay? i am explaining htis to you very simply so you can understand, and, quite frankly, this is the only way i can understand too!

🔗 Originally Posted

by http://en.wikipedia.org/wiki/Analogue_electronics

Analogue electronics (or analog in American English) are electronic systems with a continuously variable signal, in contrast to digital electronics where signals usually take only two different levels. The term "analogue" describes the proportional relationship between a signal and a voltage or current that represents the signal. The word analogue is derived from the Greek word ανάλογος (analogos) meaning "proportional".[1]

Analogue electronics are superior to digital ones performance wise. this is because, well, for example, if you were to take a camera, which gives the better picture - a glass analogue one or a digital one in pixels? or, a monitor with a photo superimposed or presented on it, or a lot of little lights?



Originally Posted

by http://en.wikipedia.org/wiki/Analogue_electronics

An analogue signal uses some attribute of the medium to convey the signal's information. For example, an aneroid barometer uses the angular position of a needle as the signal to convey the information of changes in atmospheric pressure.[2] Electrical signals may represent information by changing their voltage, current, frequency, or total charge. Information is converted from some other physical form (such as sound, light, temperature, pressure, position) to an electrical signal by a transducer which converts one type of energy into another (e.g. a microphone).[3]

The signals take any value from a given range, and each unique signal value represents different information. Any change in the signal is meaningful, and each level of the signal represents a different level of the phenomenon that it represents. For example, suppose the signal is being used to represent temperature, with one volt representing one degree Celsius. In such a system 10 volts would represent 10 degrees, and 10.1 volts would represent 10.1 degrees.

Another method of conveying an analogue signal is to use modulation. In this, some base carrier signal has one of its properties altered: amplitude modulation (AM) involves altering the amplitude of a sinusoidal voltage waveform by the source information, frequency modulation (FM) changes the frequency. Other techniques, such as phase modulation or changing the phase of the carrier signal, are also used. [4]

In an analogue sound recording, the variation in pressure of a sound striking a microphone creates a corresponding variation in the current passing through it or voltage across it. An increase in the volume of the sound causes the fluctuation of the current or voltage to increase proportionally while keeping the same waveform or shape.

Mechanical, pneumatic, hydraulic and other systems may also use analogue signals.

So, this is the way it works. how do we improve on it? well, first we need to take one aspect of it, and observe that for noise;

 Originally Posted

by http://en.wikipedia.org/wiki/Analogue_electronics

Because of the way information is encoded in analogue circuits, they are much more susceptible to noise than digital circuits, since a small change in the signal can represent a significant change in the information present in the signal and can cause the information present to be lost. Since digital signals take on one of only two different values, a disturbance would have to be about one-half the magnitude of the digital signal to cause an error; this property of digital circuits can be exploited to make signal processing noise-resistant. In digital electronics, because the information is quantized, as long as the signal stays inside a range of values, it represents the same information. Digital circuits use this principle to regenerate the signal at each logic gate, lessening or removing noise.[7]

So, we need to clear up the noise of these superior systems. if we were to analyze that the system will present the direct applied instructions, or, really simple stuff, then you will see that it is a 'flawless' system. well, i find it flawless anyways...

Now, if you were to look at the analogue system, you need to clear this noise that covers the whole system or 'thing.' this means that you need to clear the 'messages' to the 'system.' this means you need to clear the input to the 'system' or 'engine' or 'processor' or 'thing doer.' this can be done by, for phones, for example, you could take the wires and separate them, as they do, with rubber or something, preventing cross talk or noise from one wire to the other, like the wind blowing into your ear when you are trying to talk to your friend. this can be done better by using a single cable for the phone. this can be done by observing the simplest phone being a one way cotton string, but this is hard to put through a directory, so...

You need to replace the telephone lines with some sort of wire that is polarized against other wires of the same material or 'stuff.' this means you need to have a few anti electrons in the wire makeup. this means you need to have a material that repels itself from the same stuff. this means you need to use the same wires for all 'connections,' so, if it is bronze, you use other bronze wires. i think they mix them up for each connection, but if they were to just use one type, problem solved.

Precision in electronic circuits.

So, as we can see, you need to use things that repel each other to get rid of the noise. but that was like an hour ago, let's get more into this!

🗨 Originally Posted

by http://en.wikipedia.org/wiki/Analogue_electronics

A number of factors affect how precise a signal is, mainly the noise present in the original signal and the noise added by processing. See signal-to-noise ratio. Fundamental physical limits such as the shot noise in components limits the resolution of analogue signals. In digital electronics additional precision is obtained by using additional digits to represent the signal; the practical limit in the number of digits is determined by the performance of the analogue-to-digital converter (ADC), since digital operations can usually be performed without loss of precision. The ADC takes an analogue signal and changes into a series of binary numbers. The ADC may be used in simple digital display devices e. g. thermometers, light meters but it may also be used in digital sound recording and in data acquisition. However, a digital-to-analogue converter (DAC) is used to change a digital signal to an analogue signal. A DAC takes a series of binary numbers and converts it to an analogue signal. It is common to find a DAC in the gain-control system of an op-amp which in turn may be used to control digital amplifiers and filters.[8]

To get the precision better, in other words more accurate, or, make it more right, you need to simplify it so that anybody can use it. the problem with maths and science today is everybody wants to make it smaller and faster, without ripping out the overlay and starting over. if people had done this before, they would have come further quickly, as, it would have been easier to relay into a new product, yes?

So, to make the signal more precise you need to observe the binary... it is slow and clumsy! i have done away with this recently in theory, but cannot remember how to do it right, so, let's have a go at it again - i am feeling lucky!

Now, to get the signal more precise, we need to observe that the signal is electrical - if it was magnetic it would cause even more noise and be less precise. this means, of course, that we need to

use something newer and better, like, insulation of some sort. if the electronics were using, say - silicone is a popular one? - then they would find that it would insulate the signal.

But let's say that is too expensive and the machinery and mold to set it up would take time - you want to get your new i phone or some other loser product out there as soon as possible - so, you need to create a whole new approach. basically, you should try to use lasers, they are cheap and easily available in the first world, don't know about here though. this will send a precise signal, but, let's say that that doesn't go down well with the people issuing grants, what now?

If you were to observe a computer's motherboard or bus, you will find that it does just this frilly sort of processing and relays. if you were to make each signal unique, like setting the 'binary' to a set value, it will go much faster, but the mold will take some time to develop. then you can specifically set each thing to a certain instruction. this is like having a set place to work in the office - who wants to work on someone else's terminal? it takes too long to set up and change to yours, yes?

How to manufacture these quickly and cheaply.

🗨 Originally Posted

by http://en.wikipedia.org/wiki/Analogue_electronics

Analogue circuits are typically harder to design, requiring more skill, than comparable digital systems.[citation needed] This is one of the main reasons why digital systems have become more common than analogue devices. An analogue circuit must be designed by hand, and the process is much less automated than for digital systems. However, if a digital electronic device is to interact with the real world, it will always need an analogue interface.[9] For example, every digital radio receiver has an analogue preamplifier as the first stage in the receive chain.

Well well well, if it isn't that design factor i was talking about? if you are to make it quickly, you need a mold, for analogue systems and products or 'things.' to do this you need to create a robot that puts it together, but you won't be soldering anything, trust me! these systems are very 'sensitive' and react badly to welding.

So, you need to create a mold that is made out of leather, as plastic and leather stick, but leather will separate from plastic quickly when you want to assemble it. then, you need to program the robot to get the plastic to the right temperature, i would say over boiling point, yet under a temperature that leather can sustain. then, you need to simply pour the plastic into the leather case.

If leather is a bad choice, and it might be, then you need to use a metal that is not 'sticky,' like copper is sticky and has a low melting point, yes? so, you need to use something like stainless steel! this is used with cooking, so will not stick!

Multiplexers.

🗨 Originally Posted

by <http://en.wikipedia.org/wiki/Multiplexer>

In electronics, a multiplexer (or mux) is a device that selects one of several analog or digital input signals and forwards the selected input into a single line.[1] A multiplexer of $2n$ inputs has n select lines, which are used to select which input line to send to the output.[2] Multiplexers are mainly used to increase the amount of data that can be sent over the network within a certain amount of time and bandwidth. [1] A multiplexer is also called a data selector.

An electronic multiplexer makes it possible for several signals to share one device or resource, for example one A/D converter or one communication line, instead of having one device per input signal.

Conversely, a demultiplexer (or demux) is a device taking a single input signal and selecting one of many data-output-lines, which is connected to the single input. A multiplexer is often used with a complementary demultiplexer on the receiving end.[1]

An electronic multiplexer can be considered as a multiple-input, single-output switch, and a demultiplexer as a single-input, multiple-output switch.[3] The schematic symbol for a multiplexer is an isosceles trapezoid with the longer parallel side containing the input pins and the short parallel side containing the output pin.[4] The schematic on

the right shows a 2-to-1 multiplexer on the left and an equivalent switch on the right. The sel wire connects the desired input to the output.

So, it is like a switchboard for a company. this is like a modem, which is a modulator demodulator. so, it encodes and then decodes the message or signal. or, if you are an engineer, you will observe the likeness between this and a circuit, yes?

Now, to skip all this encoding then decoding, we could send the message as is through the 'switchboard.' this could be done by observing, once again, a binary circuit. what a load! i hate binary, don't you?

If you want to have faster connections you need to integrate or merge the whole thing. this can be done by using different signals electrically instead of using a physical connection. this is like holding hands in class when you sing, basically you will only be able to hold one hand with your hand, and you need to change to reconnect with someone else, or, a monkey swinging in the trees - he can only hold one thing at a time, yes?

So, you need to merge the whole circuit into a single 'transmission line.' one long cord for all messages means that the signal will go all over the place, but, only certain things react to the message. it is like telling a ice cream salesman to sell you whipped cream - he simply doesn't do anything! the ice cream man will help you though, and this will not affect the rest of the circuit, but, it uses binary, so, it might trigger something else. i suggest fully charged electrical surges.

Circuit design.

💡 Originally Posted

by **http://en.wikipedia.org/wiki/Circuit_design**

The process of circuit design can cover systems ranging from complex electronic systems all the way down to the individual transistors within an integrated circuit. For simple circuits the design process can often be done by one person without needing a planned or structured design process, but for more complex designs, teams of designers following a systematic approach with intelligently guided computer simulation are becoming increasingly common.

In integrated circuit design automation, the term "circuit design" often refers to the step of the design cycle which outputs the schematics of the integrated circuit. Typically this is the step between logic design and physical design.[1]

Formal circuit design usually involves the following stages:

sometimes, writing the requirement specification after liaising with the customer
writing a technical proposal to meet the requirements of the customer specification
synthesising on paper a schematic circuit diagram, an abstract electrical or electronic circuit that will meet the specifications
calculating the component values to meet the operating specifications under specified conditions
performing simulations to verify the correctness of the design
building a breadboard or other prototype version of the design and testing against specification
making any alterations to the circuit to achieve compliance
choosing a method of construction as well as all the parts and materials to be used
presenting component and layout information to draughtspersons, and layout and mechanical engineers, for prototype production
testing or type-testing a number of prototypes to ensure compliance with customer requirements
signing and approving the final manufacturing drawings
post-design services (obsolescence of components etc.)

This is the basics of circuit design, but, for now let us concentrate on the design of the circuit specifically;

🗨 Originally Posted

by **http://en.wikipedia.org/wiki/Circuit_design**

The design process involves moving from the specification at the start, to a plan that contains all the information needed to be physically constructed at the end, this normally happens by passing through a number of stages, although in very simple circuit it may be done in a single step. [2] The process normally begins with the conversion of the specification into a block diagram of the various functions that the circuit must perform, at this stage the

contents of each block are not considered, only what each block must do, this is sometimes referred to as a "black box" design. This approach allows the possibly very complicated task to be broken into smaller tasks which may either be tackled in sequence or divided amongst members of a design team.

Each block is then considered in more detail, still at an abstract stage, but with a lot more focus on the details of the electrical functions to be provided. At this or later stages it is common to require a large amount of research or mathematical modeling into what is and is not feasible to achieve.[3] The results of this research may be fed back into earlier stages of the design process, for example if it turns out one of the blocks cannot be designed within the parameters set for it, it may be necessary to alter other blocks instead. At this point it is also common to start considering both how to demonstrate that the design does meet the specifications, and how it is to be tested (which can include self diagnostic tools).[4]

Finally the individual circuit components are chosen to carry out each function in the overall design, at this stage the physical layout and electrical connections of each component are also decided, this layout commonly taking the form of artwork for the production of a printed circuit board or Integrated circuit. This stage is typically extremely time consuming because of the vast array of choices available. A practical constraint on the design at this stage is that of standardization, while a certain value of component may be calculated for use in some location in a circuit, if that value cannot be purchased from a supplier, then the problem has still not been solved. To avoid this a certain amount of 'catalog engineering' can be applied to solve the more mundane tasks within an overall design.

So, we could make more flexible circuits or blocks.

This can be done by making the blocks more versatile by using my 'echo' effect. this would be where the message is sent to the whole system and used only by those that are programmed to pick up the signal. of course, if the echo effect would trigger more responses or 'actions,' then we need to go through the thing slowly.

Now, we can make each block more multi functional by making it in 'layers,' where the wires are so thin they will be able to be stacked on top of each other inside the block, and send messages through the block to the things they need to go to.

But, if that is messy, we could start the whole electronics process over!

So, if you were to have a button or trigger, then a information conductor, then a mechanism to trigger - this is similar to engineering, yes? - then you could make the thing work. if it needs advanced functions, rather make the thing bigger than more complicated. tis reminds me of Voda Phone when they released their first cell phone, they had a very big thing. so, we have our basic thing, now to make it smaller!

If we were to use smaller 'bits' doing only one function, we would be where we are today with electronics! it is still quite simple, they just put all the triggers onto a motherboard type thing, or, circuit board.

Now, to make it smaller and better, we need to observe a better 'programming language' or 'bus.' to do that we could use two or three buses, yes? these could be layered on top of each other, as, there is room - open up your remote control and see how much space there is!

If we were to want to build more options into it, we would need to use symbolic systems, like the Chinese language to activate the various parts. there they have very complex symbols and things for words, but, it fits into a small space! this will let the one it means to trigger work through the likeness of the symbols.

Explaining how radios work to kids.

Radios work on signals from transmitters. these are tuned to the signal of the radio frequency, and, then they are sent out into the world over a limited distance. the transmission comes from the Morse code type signals, as, they are sounds that are sent out at a lower volume, then picked up and broadcast over the radio speaker. this means, that when the world was young, Morse code came before radio, because it was the building blocks of the radio technology.

So, you have your message or song, and then you send out things we find easy today to use,

like tablets and game boys and things like that. but, when the world was young, they wanted to send a sound to something else. try to whisper and you will find that your tongue and throat moves around a little bit, but you hear it well, of course. you cannot hear anything that you do not feel, so speakers are there to connect the body of the transmission to the tongue of the radio broadcaster, hey?

Now, when the thing is on one side, and you want to get it to the other side, you need to make sounds that cannot be heard, or bits that are electrical and magnetic, like a magnet, and then they collect on the other end and then we can hear them. but, to get them magnetic, you need to have heat of some sort, to heat up the magnet, and then it sends out tiny 'parcels' of heat that are felt by a super sensitive 'nerve' on the other end. this 'nerve' feels the heat, and, the heat it feels makes a noise through electricity like we just went through.

Harnessing the photon.

☞ Originally Posted by <http://en.wikipedia.org/wiki/Photon>

A photon is an elementary particle, the quantum of light and all other forms of electromagnetic radiation. It is the force carrier for the electromagnetic force, even when static via virtual photons. The effects of this force are easily observable at both the microscopic and macroscopic level, because the photon has zero rest mass; this allows long distance interactions. Like all elementary particles, photons are currently best explained by quantum mechanics and exhibit wave-particle duality, exhibiting properties of both waves and particles. For example, a single photon may be refracted by a lens or exhibit wave interference with itself, but also act as a particle giving a definite result when its position is measured.

The modern photon concept was developed gradually by Albert Einstein to explain experimental observations that did not fit the classical wave model of light. In particular, the photon model accounted for the frequency dependence of light's energy, and explained the ability of matter and radiation to be in thermal equilibrium. It also accounted for anomalous observations, including the properties of black-body radiation, that other physicists, most notably Max Planck, had sought to explain using semiclassical models, in which light is still described by Maxwell's equations, but the material objects that emit and absorb light do so in amounts of energy that are quantized (i.e., they change energy only by certain particular discrete amounts and cannot change energy in any arbitrary way). Although these semiclassical models contributed to the development of quantum mechanics, many further experiments[2][3] starting with Compton scattering of single photons by electrons, first observed in 1923, validated Einstein's hypothesis that light itself is quantized. In 1926 the optical physicist Frithiof Wolfers and the chemist Gilbert N. Lewis coined the name photon for these particles, and after 1927, when Arthur H. Compton won the Nobel Prize for his scattering studies, most scientists accepted the validity that quanta of light have an independent existence, and the term photon for light quanta was accepted.

In the Standard Model of particle physics, photons are described as a necessary consequence of physical laws having a certain symmetry at every point in spacetime. The intrinsic properties of photons, such as charge, mass and spin, are determined by the properties of this gauge symmetry. The photon concept has led to momentous advances in experimental and theoretical physics, such as lasers, Bose–Einstein condensation, quantum field theory, and the probabilistic interpretation of quantum mechanics. It has been applied to photochemistry, high-resolution microscopy, and measurements of molecular distances. Recently, photons have been studied as elements of quantum computers and for applications in optical imaging and optical communication such as quantum cryptography.

Well, as far as i can tell, the photon is not absorbed by mass. it reflects off of it, and, that is why we see things. basically, the photon excites the electron bonds of objects and that is why it is illuminated - that it is burning like a candle of sorts, and, that it is not absorbed, as, then it would gradually 'dim out.' okay, let's say it goes into a cave, if it shines onto each 'rock mass' it will eventually run out of reflections for each rock to rebound onto the next - like a bouncing ball? - and slowly be absorbed into the rocks, or, it could be that it reflects a lot of what was previously shone onto and then eventually only has black in it. if you close your hands together, you will see the shadows grow, meaning, that the light source will gradually be closed and that it is not absorbed, but rather just reflected from various positions.

Anyways, if the photon is massless, then how does it travel? i would say it must have mass to to travel, otherwise it would have no 'weight' to be thrown around, yes? of course, this goes against classical physics, but, if we were to observe the light traveling, i mean, what makes it travel? if it travels, well, what is traveling? we know it reflects off of surfaces, but not gases. if it reflected off of gases, then it would stop at the ozone layer, yes? it must have mass to penetrate the ozone layer, or, be massless to do so. if it has no mass, then what are we seeing with the 'reflections?'

So, we have our photon. simple little thing come to think of it. if we were to observe that it has mass, it shows as not being infinite, as, it stops when it reaches our eyes - it does not bounce around all over the place over and over as then we could see in the dark, yes? then, there would be no night time! if we were to observe that the photon has mass, then what sort of mass is it?

If we look at the sun, we will find that it is a burning ball of gas, yes? that means it will have mass too, as, it makes planets spin around it, like a normal particle. if then we would say that the photon has mass, as i am, how do we prove it? we could simply show that we 'feel' the sun on our necks, yes? if the warmth of the light makes us warmer, it must affect us with mass.

Where do yuo place yourself in the great scheme?

I believe in horror scopes, and from them i have analyzed a little here or there, and have come up with my own conclusions about how people fit into the world, regarding 'social position,' success, being a product and creating products. these four, i find, are the most defining, and, are in order.

I get this notion from the way the Greek gods arrange from the sun outwards, as, they are all planets. think about it; Mercury was a god, Mars was a god, the Earth Mother is a pagan god too and Venus is a god. these gods had relationships with the 'world' in terms of morality, blessings, fertility and understanding. you can check if you want to.

So, the first type of person is a go getter, someone that exerts themselves in life for the joy of it, and, is admired for their zeal.

The second is a successful person, a business person, or, even a capable brick layer. success is the key here, or, the right attitude towards work and providing.

The third is a performer, someone that gets high off of life and likes to challenge themselves to be admired, as, a performer or linguist - they are the product they want to succeed. it is focused inwards though, i find.

Then, there is the 'crafter.' this is like someone that creates adverts and brainstorms. this is creativity at it's finest, a dreamer, an artist. they are not the product they are trying to push, they focus their dreams outwards.

So, that is the way i see it. if you were to have some other notion, please let's hear it?

Let's play name that disease!

This thread is for all of you to send me diseases to cure. it would be nice if you were to tell me a bit about it, especially it's symptoms or effects, okay?

Let's start with paralysis? i am not sure if i have stopped this condition yet, but let's give it a go? if you were to observe that it is a problem for your spine to communicate with the rest of the body, that there is something wrong with your nervous system, then there is a glimmer of hope, knowing what the problem is, basically.

So, to get your spine to send signals all over the body, you need to get the problems out of the spine. the problems are the spine is 'dead,' tissue, as is inactive or not 'reacting.' the best way to

go about this is to 'resensitize' the nerves so you can feel, and the muscles will be useless because of lack of exercise.

Now, to get the nerves working again, you need to get to the root of the problem, being the nervous system. to get the nervous system working again, you use electro therapy to stimulate the nervous system and nerves. to get the muscles working again, use Viagra.

Regrowing lost limbs and fingers and toes.

To regrow lost limbs, you need to look to your genes. they say what your body should look like, and how it should develop. if this message is passed onto the areas that are cut off, then there will be some 'righting or wrongs.'

You can do this by adding genes from another person, but only up to ten percent of your own blood type so you do not 'change,' and this will make your own genes more aggressive and dominate your body, and, hopefully regrow the lost things. applying like once a week should bear results.

Well, cancer is caused by your bone marrow becoming too 'excited.' this is where old cells come out of your bone cells, like dead ones, and pollute the body. there is no way the red or white or whatever blood cells can fight this, as it is native to your body.

So, if you want to kill off the old cells, you need to ingest some new young cells. these cells should be taken from healthy children of primary education age, just a little bit, then injected into the problem area. these cells will fight the older cells, and they will bond, being made of the same type of cells, and then they will eventually, make the old cells younger, and the young cells older, so that there is a happy medium.

Aids.

Aids is a disease where your bodies own defenses become infected with something that will destroy your body. the best thing to do is to filter them out by injecting yourself with a mild flu, and that will get the faltering or faulty defenses to try to do their job. they will die as they kamikaze into the flu, and then will be replaced.

So, you will have to stay h.i.v. positive this way. there must be another way? i mean, if the blood cells are all dying, then you can attack them with the flu until they are all dead, yes? this will make you very sick, but you won't die from breathing, will you!

I find this strange though, that the blood cells will attack the body then the disease will come in and kill them off? i suppose we could administer that cold tablets at the same time as we ingest it, so as to suck up all the red blood cells in a phlegm of sorts, and then spit it out?

I think it would be essential to catch this disease early on, yes? but what about advanced cases? if the disease will infect your blood cells, and stop them from fighting, then they will be able to infect all your red blood cells, yes?

So, if you were to just inject red blood cells into your body, you will stay healthy, and, if you were to let them bond or merge or 'gel,' then there will be a bigger red blood cell and a smaller h.i.v. 'thingy.' then, the aids will no doubt infect the whole thing.

Now, if you want to get rid of the aids, you need other aids to infect the aids itself! if you were to have red blood cells, and they are infected, getting a different strand of aids will let them fight it out for the red blood cell. the trick is to administer as much as there is, then they will draw level, except that getting it spot on is impossible, due to cell division. if the cells all die, then you will die. this will work for a prolonged life though, but we want a cure!

If the blood cells were to split to tiny cells, then you could flush them out, yes? or, if you were to make it so that the aids cells grew, they would be caught in the 'sieve' and exit the body. the trick is to get the aids cells to the stomach where they can be caught up in phlegm.

So, the best way to get the aids cells to the stomach is to feed the blood cells they are in. to make them swell, there must be a way. to do this, we should administer glucose to the cells, something that makes them sticky and prone to bonding, hell, maybe they will become fat? if they become fat, they will probably die, no?

Autism and retardation, take three!

These diseases are terrible as they cause a lot of emotional pain for all concerned. i, myself, don't like to be around people with mental disability or problems, as, it makes me feel uncomfortable.

So, to cure autism, you need to get the brain processing or communicating with the rest of the body. to do this, you need to stimulate the brain with some electro therapy, along with the immune system. of course, the problem may be more than that could solve, so, maybe they need to repair the brain? this could be done by eating a lot of [fish?] as it has a lot of oil in it, and is used to make lipstick. this reminds me of fat, and, let's face it, the brain trembles like fat too, yes? so, you need to eat a lot of glucose, and get a lot of exercise. any damaged areas of the brain will be found immersed or covered in 'fats' and building blocks like proteins, and stuff like that, and then it will repair itself. we could follow my gene excitement ideas from previously, where we inject about ten percent of the body with the blood of someone else too?

For retardation, i suppose the same can be said. the difference comes with development of the brain, and, this can be developed with 'exercise' through steroids ingested into the body, Viagra or electro therapy.

Better than white blood cells? universal vaccine!

🗨 Originally Posted by **google**

White blood cells (WBCs), also called *leukocytes* or *leucocytes*, are the **cells** of the immune system that are involved in protecting the body against both infectious disease and foreign invaders. All leukocytes are produced and derived from a multipotent **cell** in the bone marrow known as a hematopoietic stem **cell**.

This could be possible if we made it smaller than the white blood cell, more aggressive cells because they are simpler, or, bigger and more aggressive unstably so, so that they can get even more of this stuff they are made of into the cell, yes? or, we could split the white blood cell, and get all of the excess out of it, hell, these will be two cells, yes? two points of entry, maybe? let's get down!

After not being shown how to, upon a bit of searching, find the chemical structure of the white blood cell, i have decided to make my own. if we were observe that nitrogen is the 'body friendly poison,' then we need some of this in our new cell! then, we need something to insulate it so it does not kill us, and we need it to be big enough to absorb the cells of the diseases. this calls for mucous of a lot. this is because when you are sick, you get mucous in your throat and lungs, and this is your body trying to suck up the disease and expel it from your body.

So, we need to ingest lots of nitrogen inside mucous capsules.

sounds cheap enough! making it for cancer would mean identifying the cells as being old, so, it should be fresh, as, opposites attract, and, i know that cancer cells will try to kill off young cells first. for aids, it could be young cells again, as, they will be target the old aids cells that are infected.

we could culture this for normal growth in children by admitting nitrogen into their noses from a zygote stage, or, making it so that it is part of their d.n.a. through gene therapy manipulation or something.

Then, we could make people see better than possible, by admitting more mucous to their eyes. this will dull the iris and then they will be able to see further, as, the light will have less effect on them. haven't you ever noticed how 'thick' a bird's eyes are? this is because their eyes are stronger, like as if they were more developed. of course, this could be simulated or copied by stem cell research, or, if you are in a hurry, growth hormones to the eyes, of course. this will require or need a bigger eye socket though, unless of course it condenses or 'goes more into' the skull, leaving less iris parts to see.

We could hear better by altering the hair in our ears. i am sure that if they go out of the ear hold, they will pick things even more sensitively, or, if we were to observe the ear horn that some old people use to hear better, it condenses the sound waves so that they compress into a smaller area and focus more energy onto the ear drum. of course, we could also add growth hormones to the ear drums to make them even bigger.

Our senses are dulled because that is the way they are supposed to be. this lets us do things like listen to music and operate cars into the sunrise. people should be aware of these things before they tamper with their bodies. of course, if you were out in the bush or jungle, then you should do this. if you want to watch a movie, you might get headaches.

Encoding the healing 'vaccine' could be helped by observing the bone marrow it comes from. if we were to create an organ that secretes this, then we could just sit back and enjoy ourselves. i also want to create advanced healing for cuts and bruises, so, will get to that afterwards.

So, to create an organ that mixes nitrogen with fresh air is easy, make it behind your nostrils. fresh nitrogen comes into your nose and then gets insulated inside some mucous. to get the nitrogen insulated, you need to

keep some when you breathe in or out. this means, of course, that you need to have your mucous absorb the nitrogen, and, this can be done by having an organ that keeps air, like your lungs, and, we already have lungs! so, if we were to observe that the lungs keep some nitrogen in them, and then breathe it out, we would see that we already need nitrogen for a healthy body. to get this right, we need to use nanobots to get into the lungs and then quickly construct the 'organ.' as soon as this organ is constructed, it will register in our genes, and our children will have them too. i think.

Then, we need to use the bots to produce more mucous in the lungs, and get it into our blood. this has been done by myself already in previous posts or entries about skin diseases, so i will refer you to there. but, as far as i can remember, you need to construct the organs out of cells of bones to keep structure so it doesn't collapse and skin to keep all the nitrogen in. then, they need to mix the nitrogen with the chemicals normally found in the lungs, to mix to form mucous of some sort, then get that sludge into the blood. of course, this will make your blood dirty, but, it will also be harmless. i am sure the doctors know what to do from here.

Now, for the quicker healing, you need to eat more fuels for the body. the body will use all the fuels it has, so you need to eat a lot. if you are fat, you need to breakdown these fuels stored in your body, so, maybe we could use all excess fat to heal us?

If we were to go into a sauna, we may observe that our bodies heat up to heal themselves or when we are sick. if this is true, then a sauna will help the healing process, so, then exercise will help the healing process. of course, if you were to heat the body too much, it will be harmed, as it is made out of flesh. so, we need to use lasers to heal the body.

Maybe if we were to be exposed to gamma radiation, it would help heal us quickly? too much will kill us, but if we were to observe that all cells have electrons and photons, we could 'excite' these by boosting our nervous systems 'charge.' this can be done with electro therapy, or, genetically, with;

Electrolytes are minerals in your blood and other body fluids that carry an electric charge. **Electrolytes** affect the amount of water in your body, the acidity of your blood (pH), your muscle function, and other important processes. You lose **electrolytes** when you sweat.

So, if you lose electrolytes when you sweat, you need to keep cold to keep them. this reminds me of cryogenic freezing, but that is stupid.

Now, if you were to observe a way to be hot and cold, genetically, you would have the perfect healing factor. i suppose this can be done with particle annihilation. you could inject yourself with some electrons and anti electrons in a dual stream shotgun style needle, or something. this could be done genetically with, well, i am sure the doctors have a better way of explaining it.

Curing all mental ailments without drugs!

I have been diagnosed with schitzophrenia, but know i am also bipolar. it affects different people differently because their environment and body and mental chemicals and all that jazz are different, but, honestly, besides actual autism or retardation, there is no problem, unless, the 'victim' cannot handle it.

I say this because it all comes down to attitude. if you can sit with a shrink for months while they tell you why you are unhappy, then after that time they prescribe medicine, then it doesn't need medicine.

So, if you were to look at your dementia or what have you as a blessing, that you can hear voices, and, learn to use that to your advantage, then you are thankful. if you were to say to these voices, look here, i can hear you, you are part of me, not some demon or something, then they will help you. if you were to walk towards an intersection, and they distract you, it is you distracting yourself because you feel you need not worry about the intersection. then, you need to control them, think why they are shouting - are you in danger? are you supposed to be paying attention? in the case of voices, you need to overcome the problems you have with people, and listen to them. these 'figments' are part of you now!

Now, if you were to learn to control these things, as i have, then you will be happier. i should be low all the time because i am bored, they say, but i find things to do. i like to patrol the house all the time, flit in and out of radio broadcasts, and analyze the messages of the radio, while they are gone, they are still a memory. a memory of yours. your memory. you can choose to remember anything you want anytime you want. if all you can think about is getting raped, then that is because, well, you are either trying to avoid it, say, in your kitchen at home with your family around, or, pardon the expression, you are into feeling sorry for yourself. get a hobby!

The path of least resistance.

Of late, i have been approached by people asking why i am so happy and why things always seem to go right for me. my answer simply is that i am on the path of least resistance.

The path of least resistance, or, the path as i call it, is where you accept your role in your family, community and society, and act with much duty towards it. if it is hot, and you want to wear shorts to work, you might be scolded. for this reason, i never go to work nor anywhere it

is cold in summer. this is resisting society but not resisting yourself. do you personally put yourself before the money or role in life? this is possible, because it is true. if you are into wearing black, and all your friends will be wearing white to a function, and you feel like wearing black anyways, you are true if you wear white or black. the key here is to stop worrying so much, and "just do it."

Daydreaming can be constructive. you may create a great self image for yourself, that lets you settle down as to your place in society, and then you will worry about other things, hopefully constructive. having a sense of duty is tantamount to this path.

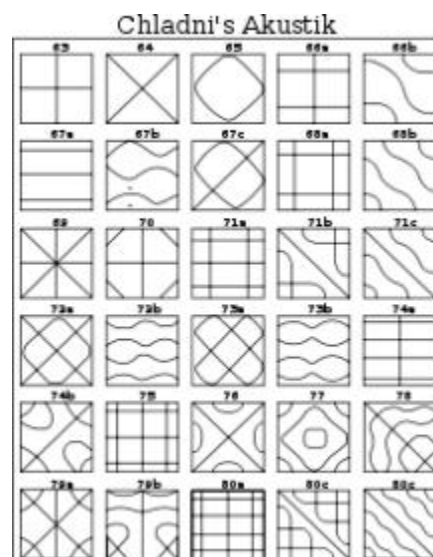
Or, how about loving? if you really love someone, let them know. if you end up loving and not getting love, and you want to be happier, 'just accept it.' here acceptance is key, unless, you day dream a better path for yourself. do not resist, unless you are justifying your role, your happiness, your emotions, or anything else that matters to you.

Acceptance, duty, love. these are the keys to getting the fairies on your side. everything is faeries. they are like from an atom to a mountain to a star. if you find your place in the motion of matter and thought, then you will see things go your way.

Literature science.

We have found that there is a science of sorts behind the languages we speak and write, and, i bet there is more to languages still. if we were to observe what good writing or speaking is, it needs to be comely to be followed properly.

So, there is the musical scales. when we read, we often say these syllables out loud or softly in our minds. if we follow the 'scales' for sets of syllables then we will find that it sounds 'better' to us and we enjoy it more. this is something that the best authors do naturally, and, why they are successful authors.



This is what the sounds look like to our ear drums. of course, we will have ones we prefer, not only due to our own taste we choose and develop, but also because they are more exciting then others. when we read these on paper or screen, our senses alert our eyes to a visual display like the one you get from some sound players on computers, yes? these show us what we are seeing, and, as children we all have the same favorite tastes from food, and favorite colors that boys and girls like, so why not the same 'favorite sounds?'

This goes to show, that, if you word your passages carefully enough, you can draw a great picture with words on a page, and, in each sentence and even word!

How to read languages.

When languages were created, they all had something in common. they were all like chinese, which can be deciphered by looking at the pictures and finding a message within, if you know the order - right to left, bottom to top.

Now, from this scrawl, came true languages. instead of reading how to learn the words of the language, you should learn the 'sounds.' if the sounds were to sound like a cow, or oo or ou or something similar, you need to identify what a cow is in those parts. this cow sound means that it is fertile the land, or fertile woman with child ['woo'man?'] or even that it is charging [woohoo?].

So, once you identify the syllables, you may attribute them to animals, as, then you can identify with the things that were plentiful when the cavemen did their language building. how about a "bridge?" brr cold water, dje for "jump," and jump comes from stammering 'ju' when you go up, and 'mphf' when you come down.

So, reading any Germanic language set is quite easy - anything that looks like English. all you got to do is listen to the syllables, and attribute it to as far back as you can.

But, reading other dialects or ways of writing is different a little bit - you can decipher them directly into cursive! just get a feel for where the letters make sense, and you will know what is

going on.

This does not work for the ancient writings of eastern Europe. that i am still getting the hang of.

Stone masonry.

This is a very technical art. in it you will learn to control the emotions and thoughts of people viewing or being inside these structures as if it were a form of mind control, or, elevator music. if you do it right, you could have a great attitude for a work place, or a great place to take your valentine to score.

Now, there are on wikipedia a list of numbers and what they represent. if you were to take a bigger number, it would factor into all the divisors of that number, and many smaller segments, and, as always repetition works, so the more fours it has in the total angle or wall length, the more of a 'four effect' it will have.

It is safe to say that with all these angles, people will change attitude when walking along the outside of the building, so, if you wanted to have them calm down after heated meetings, then you could suggest they walk around the outside, at a certain speed or something, to cool off.

But, if it was a military base, then it is hard to make people aggressive with architecture. it is also safe to say that each number from one to ten has an opposite, being 1 for 10, 2 for 9, 3 for 8, 4 for 7 and five for 6. so, if you experiment and find say half angles will have another effect on the psyche, then you could reverse those fractions too.

How to read faces, voices and timing.

Whenever you meet someone new, you will judge them based on the people you have already met. this is natural, and, comes from our birth like object recognition or 'thing identifier.' you will at first learn that that hairy one is full of fingers, for example, or that softer spoken one is full of toys, yes? then you will compare people to them, and you will start judging.

Then, you will start to think of the new people you meet, and then you will form a image of humanity. from there on, you will slowly start to think of yourself fitting into your image of humanity, in some way shape or form, and then you will either be happy with it or not, but you will no doubt challenge yourself to change it at some point, trying new things, maybe? remember the more it means to you, the more you want it to change.

But, this is about faces, first. if you were to look at someone in their face, you will feel a lot of things. you will think, man, that guy is wrinkled, he must be an ass, or, hey, that woman is short, she must be cute, yes?

Then, you will form an opinion about them, how to greet them, how to make them like you, or

not. then you might try to find a way out of there, maybe they do not like you either or something? this all comes down to facial angles, if you ask me. for a westerner, it comes down to cartoons and for a third world person it comes down to something else, i am not sure what yet, but we will get there.

Now, if you were to judge someone based on their face, then you would have to think of where they stand first, as, you will, depending on where you think you stand to them, identify where they stand first. this is like putting on an accent when you speak to other peoples, for example, or being rude if you think the waiter is lacking some sort of attitude.

This all comes down to what you see! this all comes down to what you hear! this also comes down to where you are, what the time is, and stuff like that. if you were to want to find your place in society, then your best bet is to identify where others that look, stand, sound, activity cycle, and so forth, stands. this is what they 'see.' there are ways to change it, like wearing clothes, for example.

Reading foreheads.

Basically, the way i see it looking at pictures of famous people, the quieter stars will have foreheads that go outwards at an angle to the top. this is because they look in the mirror and see a pair of horns! that is something that people of the west find with cartoons anyways, that they have a pair of horns like the devil, and will try not to bring attention to themselves.

This is also a sign of good looks. this coupled with the 'horny part' will mean that they will feel confident yet quite, charging down people with subtlety and grace, a gentle man if you will. maybe they will not like the horns and strive to be true to what they want to be?

On the other hand, people with foreheads that go straight up will try to be funny, mocking those with outwards or inwards facing foreheads.

Lastly, people with inverted foreheads will be unhappier and will try to prove themselves, because they have a 'pointed exterior.' these people will try to be the best they can be. for some reason, these people are less popular, it seems, as they have no 'horns' nor normal things in their 'faces.' i find this is because they see themselves as equal, yet have the foreheads of a roof and stuff, making them look clever, maybe?

Reading cheekbones.

I find that cheekbones come right under the eyes, so will have an effect on how people react to us. i am starting with the biggest parts of the face, because they have the biggest visual impact on us as an observer. i guess there are high, wide and low cheekbones, yes? let's deal with that first?

So, the cheekbones of high types, what do these mean? if the person has high cheekbones, they

will, as they speak, guide you into their eyes, yes? this is because their cheekbones are close to their eyes, so, if you don't understand something, you will move to their cheekbones and then immediately back to their eyes, as they are so close together, so you will basically believe everything they say, or follow what they are saying. maybe a teacher would be a good example of someone with high cheekbones?

If they are wide, you will maybe, when listening to them, look around the room or wherever you are, making lying easier for them, or disguising your message with something a little bit of a fib, yes? this would mean, of course, these would make terrible teachers, but good politicians, of course.

If the cheekbones are low lying, then they will make the person look to the mouth of the person as they are speaking, or, lower their line of vision into a sense of "Why am i looking down?" or submission, yes? this would be like a preacher, i suppose, or a police officer, as, when we look down it is usually out of looking for a foundation for what they are saying, or thinking we have found foundations in what they are saying, of course.

The brow.

The next biggest effecting thing in the face is the brows, as we look people in the eyes when we talk to them, maybe this is the most important thing, yes? these with the cheekbones will guide us into their eyes or out of their eyes, of course.

If the brow is wide, it will send our eyes in 'prey mode,' as the eyes of a predator, in nature, are focused and in the front of the face. if their brows are wide, then it will make us more aware of things around us, like a military sergeant speaking to the troops, or a good team builder, making us worry about those around us, of course.

If the brow is focused, then we will find ourselves looking into the eyes of the person, like a good teacher making us focus on them and drawing attention to themselves rather than things around us.

This is because the brows are ways out of the eyes, and the further out you look along the brows, which attract our attention when we look into the eyes of those we are speaking to, you will either not escape them, or you will. depending on other factors, you may decide to pay attention to them or not.

Voices.

This comes down to speed the person speaks at, tones used, and accent. basically, the faster someone speaks the more they have to say, the deeper the tones used, the more serious they are - obviously - and the accent dictates who they think they are speaking to.

So, if the speed someone speaks at is slow, then they are being careful, of course. if they speak as if they cannot stop, maybe they are attacking someone, something, or defending themselves? maybe they are trying to make money? maybe they are short of time? maybe they are sick of something?

If the tones used are high, they are trying to trigger a reaction from you out of excitement, as, every time someone speaks they are trying to get a reaction. this is like speaking to the dark when you think there is an intruder inside your house, you want a reaction, no?

Now, if the accent used is used to try to relate to you, you know the person is your friend, and if it is used to alienate you, know they are not trying to win you over, or, trying to make you submit, of course.

Timing.

When we go through our lives, we do things, or, are affected by things. sometimes these things will make us feel high or low or excited or disappointed. it is our guts interpreting the world around us, and the events taking place.

To plan your day, the world has been divided up into units of twelve and sixty. this is the way our energies are affected by the horoscopes. basically, the most testosterone is experienced in the first hour of the day, being from twelve to one am, or, pm. this is the age of the rat to the Chinese understanding, and Pisces to the Greeks. there are doubtless others that fall into this arrangement, and, they all affect our lives.

If you read what that sign is about, it will show you, in order of which i am not sure, how the world works, and when the best time to have your hair done, or, go shopping will be. hell, it will show when the best times for students to take their tests will be too!

In all, it relates to G.M.T. where the twelve rests. finding the relations between these things will help us uncover the best times to do things, i reckon.

Another thing about time, going right is resisting time, going left is going with the time, and staying still is like allowing time to flow. this is because the sun rises in the east, or, towards the right.

And, if you look at a map, it is tailored to be set to go north. if you face north, the directions make sense, any other direction and then your west and east change a little. so, if you look north, on your left is west, yes?

Foreheads part two.

I suppose if the forehead is 'big' it inclines people to think of them as being clever or deep, and, of course, shy, yes? we always reflect how others treat us, so, this makes sense, yes? of course

with a big forehead, it tends to imply that the person is sought for to solve personal problems, so, it is logical to assert or guess that people with big foreheads are good listeners, or used to listening.

Maybe the opposite is true for people with small foreheads? i suppose so, it is only logical to assume or guess that people with small foreheads are thought of as stupid or bad listeners.

how about wide foreheads? if a forehead is wide, it implies or supposedly means that the person has a big face, so, would also mean that they are easier to focus on, like a dart board would be easier to hit. it also might mean that they look stupid, so are treated as if they were stupid by peers and role models, and, therefore, they will be frustrated and wanting to prove themselves, yes?

Cheekbones part two.

For the cheeks, we often kiss people on the cheek, or, our faces might get fat with a lot of wobble on the way we speak, of course.

If we observe the cheeks of people that are wide, they will look more like a sissy, as their cheeks will be more kissable. this would mean that people treat them with more 'concern' and 'praise' as if they had a baby face, yes? then, they will become children, needing to be sought after a lot.

Then, how about if the cheeks are narrow? this would make them look more 'distinguished,' as they will look more hard to kiss, they will be a 'mission' to get the attention of, as, they will be kissed 'less easily.' this means they will become aloof maybe?

Now, for the fatties! if someone has a fat face, they will look too easy to kiss, and, will be 'sidelined,' and ignored. then, they will become more driven to succeed and easier to approach, as they will be open minded and stuff. they will be more driven to succeed when they are 'shunned,' as, they will be trying to find a way to get people's attention. these make very good employees!

More on voices, pitch and pace.

When we listen to people's voices, there are two main categories for them, being how high or low they are, and how fast they are.

Now, the tone of the voice will reveal how the person is feeling. if it is low, it will mean they, as we have discussed, are trying to be taken seriously. of course, when someone screams they do so in a high pitch meaning they still want to be heard. it is that a low pitch proclaims demands, and a high pitch is about claiming innocence, so, if someone is lying it will be in a higher pitch than normal. if you were to examine somebody, you would have to see how they normally speak before finding the pitch they are using, and, if they were to usually speak in a

high pitch it would be because they are used to hiding things, yes?

The speed or pace that someone speaks at will be faster if they are used to being told no. this is because they need to get their message across before there is a resounding no once more. this is typical for 'servants' that are not treated well. of course, if English is not your first language, then of course you will speak slower and deeper, yes?

If you were to mix eye contact with tones, you would find that there is even more pleas of innocence or demands. if the person is focused on the listener, then it is more of a demand.

Body language.

Very simply, the most obvious sort of body language is that we reach to the driver's side in our western society. many city dwellers will look to the side of them that the driver sits on when we are looking for help, and when we think we are helping as adults, we will look to the passenger side. this is because we are used to seeing our parents there, or our kids.

Then, we also look right when we are speaking, and look left when we are adjusting or listening. this is true for right handed people at least, because when we use our right hands, we are usually writing or using our tools or the kitchen utensils or whatever.

Now, if we are using our left hand, it could also mean we are taking something in, as with eating using our left hands for shoving the food into our mouths. this is true for all people that use silverware, but, for 'savages,' they just put the samp into their mouths with their used hands.

When we look behind us, we are looking to help someone, as is in taxis and passenger cars. when we look through the person to the next person, we are looking to skip past that person onto someone we think more of to be around.

When we look down, we are unsure, when we look up, we are sure yet frustrated. looking down is also a sign of fear, as we check out footing, so to speak.

Height.

Some people have said that being tall is a sign of evolution. yet, when we are young, lack of sleep can stunt our growth, so that may also play into it. i know the eastern people are all quite short, so is it that these people that are so good at maths are not 'evolved'?

If you were to look at someone, then you get a visual impression of them. if they are tall, you think that is good, they seem to be less worried about being short. if they are thin, they are less worried about being fat. if they are attractive, then they are less worried about that too. this eats away at stress, as being short, fat and ugly will stress you out socially. this goes to show that these people are probably not very nice as people treat them with contempt, yes?

To be in the middle ground of height and 'dimensions' is where there is lot of naturalness. if someone is normal height, they will be more concerned with things as if they were neutral, yes?

To define skin tones, well, the more dark someone is the more time they spend in the sun. this also denotes basic health, as vitamin d is found in the sun, as well as fresh air. then there is the regional stuff, like being in a desert or ice caps where there is a lot of heat or cold. if someone has a pale complexion or skin tone, then they will not be as strong as one with a darker one on average, unless there are visible muscles on them.

So, who is more intelligent? the way i see it, intelligence is founded on one's trying to learn things, leading to a natural exercise for the brain. retreating to yourself and burying yourself in books, for example, would lead to more intelligence. of course we spend our time doing something, and we develop from there, as long as we try new things. if you were to do the same things over and over, there is no guarantee that we will get better at them, but there is always the chance, depending on what we are trying to do.

Rebellious faces.

It doesn't take long in life to recognize people that are a threat to the powers that be, and take them into our hearts. there are two kinds of leaders, ones with triangle foreheads, and ones that have faces that resemble that of an animal we recognize - one that breaks the rules.

Since childhood we will want to rebel, as, there is so much resources, and so much people, we will want as much resources for ourselves as possible. 'emotional comfort' is also a resource.

So, who are the happy people? i find that those with dark skin tend to be happier, and those with narrow brows are also inclined to have more people listen to them.

If we were to check 'shoulder width,' i find those with narrow shoulders tend to be more popular, as, they will fit into the gaze of others and themselves more easily.

It is also the less attractive people that will be more intelligent, as, they will try to find something else to do other than chase people that don't want them to sexually, naturally.

If we were to look at people's ears, we will find that people with small ears do not listen as much as people with big ears, because when we see our ears, we will come to accept them and everything they mean to us, so as to stop fighting oneself. if we fight our forms, we will just sit alone all day.

Jaw bones.

People are considered stronger if they have wide jaw bones i find, because it looks like musculature or something similar. it is like when someone likes to be around tall people for comfort, size means comfort for us, as when we were kids they will be our parents, yes?

The narrow jaws are ones we like to kiss, as it looks hard to kiss them. wide jaws are also thought of nice to kiss because we think of the supposed strength of the kiss.

We like to be around people with big features and that are large in size, and they will get used to this, shrugging other responsibilities for the grandeur of looking after people and gaining popularity. so, tall people often shrug work and talk to others as they enjoy being ones that make people feel safe, not only tall people, but big people too. this means that 'big people' are not very serious about responsibility, yet will be good at looking after others - a parent without a job - a mother.

More on voices.

Where the person places the emphasis is where the person thinks the emphasis will be to you or them. they are likely to accompany this with a gesture from their hands or feet too. if the speaker was to emphasize something, they are drawing attention to it. this is because they think it is relevant or not relevant.

So, if they were to lower their tone with the emphasis, then they are speaking as if it were important, and if they heighten their tone with emphasis, it is because they think this is stupid.

Word usage and choices.

We can tell a lot about a person by the way they structure their sentences grammatically or with what words they use. if they use a lot of big words, they are trying to underline the seriousness of the situation, and a lot of small words will be used when they find something trivial, i suppose?

So, if we were to observe the speeches of non English first language speaking people, they will tend to be full of big words if they are leaders, and full of bad word choices if they are not taking it seriously. this is why african and asian and south american leaders always use such big words - they also think it is a form of brainwashing, as, the people will associate these words with them, and this leads to a supposed 'better image' of the leaders of the people.

So, if someone uses verbs a lot, it is actually because they want action, nouns will lead to them wanting to say who they are speaking to and who is speaking and adjectives will show the description of things, so, will be when the speaker is trying to point out a difference between two or more things.

Demeanor.

What we show the world, it is said, is always the opposite of how we really feel. i was not so sure about this, as, we often show the world how we feel when we cry, when we cringe, when we blush, and so forth.

For this reason, we will always try to hide what we feel. this is because any sign of weakness is found to be exploited over us, even by our friends and family.

But, it is not always the case. if we were to be intimate with someone, then we would show them how we truly feel. this is essential that we vent every now and again, so when we get stressed or explode, we will be our true selves - when we lose control.

In our childhoods, we often find the correct most comfortable way to get along with others. this leads to our backbone of emotions too, as we are often disappointed that we have to act in a certain way to feel we are accepted by society. i find this true especially in little kids, as, they will copy adults as a form of inspiration. this means, of course, the older we get, the less we copy people that are older than us, as, they will often be dead!

So, if we were to be ourselves, we will feel happier, yes? this leads to some of us just saying no to trying to fit in because it makes us too unhappy, and nobody can live like that, can they?

Accents lead to...

In the whole world, we all have accents. these we pick up from the society we live in, and, therefore, we find the same types of words used as by our society.

If it were that there was an accent we develop when we speak, it is not because we are copying people, it is rather because we are using the same sentence structure as them, leading to the same 'break points' in sentences. i call spaces and pauses between words, or, the sounds we make between words, 'break points.'

Then, we also get used to speaking to certain people all the time. this is where we will try to, if it is a group of girls, for example, talk about people's names, the same names or nouns that they use, so, accents are also cliquey, you could say.

Accents also develop from the media. if we expose ourselves to watching soccer from Spain, for example, we will hear a lot of pauses when people are speaking, meaning that we will also hesitate when we are enjoying something, just to make sure we are enjoying it, you could say, yes?

So, if we were to watch horse racing, when we are excited, we will speak a little faster, so with baseball and basketball, or all American sports, as the ball is changing possession the whole time. if we were to listen to the news a lot, we will be spending time with ideas and develop a better intelligence, as adults do. so, if you were to watch a lot of fantasy, you will have a better imagination - something crucial to new developments and progress, yes?

Now, to listen for what kind of person you are hearing, you must try to listen to where they breathe to talk. it will be right before or right after the points they want to dwell on, yes?

Avoiding words.

It is safe to say, if people like and use certain words, they will also avoid certain words. this is like a person with a big nose avoiding using the words big and nose, of course.

I myself avoid using big words as i believe that non English first language speakers could find it easier to understand, as well as kids. [I also don't know what half of them really mean, mind you.]

So, if someone avoids using the word steal, then it is obvious they fear being stolen from, or being called or identified as a thief.

There are a lot of common words, identifying which ones are replaced with adverbs and pronouns and so forth. i know i seldom say he or she, as i believe that these writings of mine should be neutral towards gender.

Now, someone that does not speak, instead shaking or nodding their heads, certainly has something to hide. figuring out what it is can be found by a simple conversation trying to get them to say those words.

A good way to find a thief out, so to speak, is to speak to them about thievery, like "hey, that obama stole his daughters heart this valentines day!" and looking for a reaction. generally, if the reaction is strong, then it denotes a out right refusal to accept that their stuff will be stolen, and a subtle rejection will show that they are actually hiding something, yes?

... simply listening to where they use big words instead of small words will show where the deceit lies, yes? this could be a personal problem or shortcoming of theirs, so, you can learn a lot about people the way they speak, of course.

Past, present and future.

I have been reading up on social mathematics, one world conscious and have my own theories about how to predict the behavior of people, and, more specifically, how to see the future of events.

If you were to be hungry standing in the corridor near the kitchen, and you need to pee, you will go to the bathroom first, then you will get something to eat. this is social mathematics.

If you were to observe a dice rolling, there is a one in six chance of it landing on any of the numbers, but, there is a hundred percent chance to predict the dice roll if you know exactly how the wind is blowing, how much effort is placed on the roll, the texture of the surface of the roll,

and which was facing up at the time of the roll. this is determinism. this is fate.

So, if you were to observe that we can predict anything, and, knowing all the factors of the scenario, we will predict anything, then it is up for grabs to be the first real fortune teller! sounds nifty?

If we were to observe the theory of everything, we will be able to predict the future. i have had many encounters with this foul foe, and have prevailed! every time i get it right it feels better than the last time, of course. let's get to it then?

If we were to observe that there is a strong and weak force, and that these forces just work on different materials, that is the basics of the theory of everything, being eleven sub categories they say, but who cares what they say?

So, our strong force comes from electron bonding, and our weak force comes from electron bonding. there is magnetism, there is gravity. so, we can say there is electron forces, and there is electromagnetism. surprise surprise, all we need to know about is the electron!

Now, if all motion is controlled by electrons, then all we need to know is how many orbitals are moving at any given time to get the right read out of where they will go next, determined by the protons and nucleus. hell, electrons even bond to photons! electrons must make up the nucleus and proton too, as, there is no other sucking force to hold them together - no negative spin [sucking force].

So, what is bigger than a electron? how about a cell? what about a human being? if human beings are made up of a certain amount of cells, then we will know that they actually make organs. this means organs make people! of course, now we can predict the future with just the people, but, what is like super massive? how about planets and the sun?

This goes to show you that horoscopes do predict the future. this means that we can, without any uncertainty, predict the future one has if one is not aware of the future with the guideline shown. but, just to be rebellious, people will try to alter the future, yes?

So, if there is going to be a rally, and there is a bomb scare, common sense will tell us that this would happen if people were aware of the rally, yes? now, if the future can be 'prevented' then it is hard to tell the future. this is where social mathematics comes in!

Everything works on 'drives.' if you know there is a wasp in the kitchen, you will get hungry enough to go in there in one way or another. if you know there is a rocky road on the way to the girlfriend, then you will still try to get there, yes? drives.

So, we plot our futures from the planets and stars, then we add some social mathematics. i suggest that learned people of either of these gets together with the other along with some horoscope people, and finds a way to predict the future, yes?

This thread will be there for the sake of my magical research. i need to record it somewhere, and know none of you will stab me in the back, yes?

Okay, let's recap with the spells i have shared with the world? i have a special classification system described by the fantasies of others, and i have remodeled it into ten spheres;

[1] protection spells, spells like shield that will protect you from harm or other things.

[2] change spells, where you change reality to suite yourself.

[3] enchantment spells, where you charm others or nature, or, faeries into changing.

[4] necromantic spells, where you work with faeries and life energies to change things.

[5] invoking the spirit spells, these will be where you create things or energies.

[6] illusions spells, this is the easiest to do, as they only look like change.

[7] conjuring spells, these will be simple, summoning creatures or elements for you to use.

[8] divining spells, these will reveal truth to you.

[9] divine spells, these you will need to pray to spirits for, being hard to do yourself.

[10] psychic and psionic powers, these are where you have mastered the universe and yourself.

It was believed the higher level you have in some things the worse it will be for the others. of course, the less spheres you have in the beginning the easier it will be for you to specialize, yes?

So far i have got a few right. namely, [1] magic missile, [2] shield, [3] mage hand, [4] wave of fatigue, [5] blind, [6] animate object, [7] mask of a thousand faces, [8] blink, [9] invisibility, [10] minor illusions, [11] fireball/lightning bolt and [12] wave of acids, maybe with a few more, i forget.

Are there any questions?

Magic Psionic and Divine guidelines.

This guide will help you in your practices;

- [1] Divine powers are where spirits help you [culture],
- [2] Psionics is your mind altering your world, imagination & fantasies that faeries share [psychology],
- [3] Magic is where you command the world to obey you, faeries and stuff too! [physics].

As you can see,

- [1] Divinity arts is the simplest form of *symbolism,*
- [2] Psionics is the mixture of science, culture and *imagination,*
- [3] Magic is mastering things like *science, maths and biology,* among others.

If you need help or find something difficult to do, start with divinity while you learn psychology or the art of communications scientifically as done by shrinks, then move onto fantasy blending with reality, then move onto altering reality.

Remember to do something new each day to get the favor of the universe around you, or, try to solve things that are challenging. try some gardening to get in touch with the elements and other forms of life, go sit on the beach and watch the waves crash, women swim and people play football. go to the bar or mall and listen to new stories to learn new ways of thinking, i mean, really listen. watch how they do things, analyze how they feel and find new approaches to achieving goals. i call this personal growth, and, by doing this, things will become easier. of course, you can do all this if you have satellite television, too!

As a reminder, to make real magic, you need to light a candle and ask for spirits to reveal themselves. you need to look into the candle where blue meets yellow, making green, or, the hole in the flame, yes? as soon as you see the little faces, you need to also see little colorful spots on the walls, then you will be activated. also, you will need to learn a moderate amount of science in useful doses to prepare you for some of the spells and powers, okay?

Chemistry and physics basics.

In life, there are things like chemistry where we observe or learn the way that things mix, and physics where we learn about force.

In chemistry, there are lot of elements that make up the world. these are the biggest things out of the two. we do not learn about atoms, but rather how atoms make up the world on the surface. in physics, we learn about atoms and how the atoms are made, so, chemistry is like big physics, but they both are very small.

So, if we were to learn about either, we will learn the things that make them up. in chemistry,

there are dozens of elements, and in physics there are about a dozen only. this makes you think physics is easier, right? well, they say that physics is far harder to learn than chemistry, and, chemists tend to be more common than physicists. basically, you need to understand materials in physics and chemistry to become an engineer, so listen carefully to your teacher when they talk about either of them.

The best things to concentrate on in chemistry is water, coffee, and other things you use a lot, as, a practical examination about something that matters will include these things. water is H_2O so will be used a lot. you need to learn there is an H and two O's in water, so, if you had it any other way, you would not have water, unless it was diluted or mixed with something. if it were mud, for example, it would be silicon and about the same amount of oxygen mixed in there, so mud, taking away the hydrogen, would be Si_4O , yes?

Science is the name for both of these things to be grouped under. if you want to build inventions one day, this is the one for you. it comes with maths though, but, maths is easy as we can see.

If you were to want to mix things to make things, you would typically be making fuels for power stimulation, or medicine for plants, animals and, of course, humans.

If you want to make fuel, the things you need to consider is that they burn easily. gold would make a very bad fuel, but oxygen is essential to fires, and that is why it is used in so many of the fuels. fuels are usually found at the top of the periodic table as far as i can tell.

Medicine is basically all the things that are natural in the world. for a good treatment, you need something that has carbon, oxygen and hydrogen in it, as these are essential fuels for the body to recuperate and nitrogen is a poison that is used to kill off old cells, as it is not carbon based, and, is not a good fuel, but is plentiful in the body. things you will look for as medical things are mixtures of the elements, like penicillin. usually these mixtures will be dealt with at the top of the periodic table, so, it is essential to learn these things with bias.

If you were to mix things, there are two kinds of ways they mix - the first is electron bonds for solids, and the second is orbital mixing for elements in chemistry. both of these use electrons, as, we know electrons suck things together.

In chemistry, we get electrons that bond because some of them are the opposites of others, like men attract women, or opposites attract, yes? this

is because some orbitals are s orbitals, and some are other types. all of the orbitals are 'clouds' of electrons. electrons suck anything, so will stick together. this is because they are bound to quarks which give fuel to them, so they stick around, floating around the outside sucking things closer to them. this is because bigger things attract smaller things, like with gravity.

So, if we take a solid, what keeps it together? before you say orbitals - which it is - we must ask why? why do orbitals keep things together? the first thing we will notice is that in the big world, similar things are attracted to one another, like water running together in a delta, or earth elements drawing things down to them - if you were to throw a piece of metal in the air, it will fall to the earth, yes? this is gravity, which is a force from our earth and sun that attracts things.

When things get hot, they go up, when they get cold, they come down. this is because of orbitals being excited by the heat, and the photons in the air will start to move around, all over the place in fact. this is backed up by the colder cooled down non excited orbitals coming to earth because their photons are not excited by the electrons orbital clouds anymore. this makes sense as hot air balloons and steam, yes?

But, what about kites? they go up because they meet resistance, and, are earth meeting air. this repels each other, as they are opposite elements, and, then the kite can only go up, as it is getting excited itself! it is getting excited because there is 'resistance' and that makes heat, warming the kite, making it go up.

Why are they held together?

If you were to observe elements and why they are held together, it is because they have opposing orbital charges or forces and they therefore attract each other, as, we know, that opposites attract, yes?

The electrons will be the suction - like a plunger? - holding it together as they have negative spins and charges. if they had positive ones, they could move around and repel each other. so, why do metals separate and need to be nailed together to hold? this is because they are made of the same stuff, and, having a total positive charge will repel each other. this is not true for magnets though, except if they were made of the same stuff, but, if we remove the charge by adding positively charged things to negatively charged things - one third negative, two thirds positive, plus, one third negative? - they will sit completely neutrally; i wonder what that would do?

Anyways, what holds particles together is force. this is like electrons and photons and stuff and they are all charged. when you have a lot of lions in nature, you get one male that is surrounded

by many females - think of it as one nucleus surrounded by many electrons and quarks? - and then they are all drawn, pushed and pulled together through like 'credit' being attracted to 'debts' in accounting - they cannot be listed into a functioning business without there being credit for long, can they?

So, if you were to have a lot of particles, you would have either chemical or physical bonds. these will see the atom being attracted to some atoms, and repelled by others. think of how water collects in a delta, or, how planets repel each other in our solar system - we all all going into the sun, but, there is a force of repulsion that keeps them apart. it is electromagnetic, and, comes from the charge of the planets, like a orbital is pushing away from another orbital of the same charge type.

Atomic structure.



Originally Posted

by <http://en.wikipedia.org/wiki/Atom>

Though the word atom originally denoted a particle that cannot be cut into smaller particles, in modern scientific usage the atom is composed of various [subatomic particles](#). The constituent particles of an atom are the [electron](#), the [proton](#) and the [neutron](#); all three are [fermions](#). However, the [hydrogen-1](#) atom has no neutrons and the [hydron ion](#) has no electrons. The electron is by far the least massive of these particles at 9.11×10^{-31} kg, with a negative [electrical charge](#) and a size that is too small to be measured using available techniques.^[32] It is the lightest particle with a positive rest mass measured. Under ordinary conditions, electrons are bound to the positively charged nucleus by the attraction created from opposite electric charges. If an atom has more or fewer electrons than its atomic number, then it becomes respectively negatively or positively charged as a whole; a charged atom is called an [ion](#). Electrons have been known since the late 19th century, mostly thanks to [J.J. Thomson](#); see [history of subatomic physics](#) for details.

Protons have a positive charge and a mass 1,836 times that of the electron, at 1.6726×10^{-27} kg. The number of protons in an atom is called its [atomic number](#). [Ernest Rutherford](#)(1919) observed that nitrogen under alpha-particle bombardment ejects what appeared to be hydrogen nuclei. By 1920 he had accepted that the hydrogen nucleus is a distinct particle within the atom and

named it [proton](#).

Neutrons have no electrical charge and have a free mass of 1,839 times the mass of the electron,[\[33\]](#) or 1.6929×10^{-27} kg, the heaviest of the three constituent particles, but it can be reduced by the [nuclear binding energy](#). Neutrons and protons (collectively known as [nucleons](#)) have comparable dimensions—on the order of 2.5×10^{-15} m—although the 'surface' of these particles is not sharply defined.[\[34\]](#) The neutron was discovered in 1932 by the English physicist [James Chadwick](#).

In the [Standard Model](#) of physics, electrons are truly elementary particles with no internal structure. However, both protons and neutrons are composite particles composed of [elementary particles](#) called [quarks](#). There are two types of quarks in atoms, each having a fractional electric charge. Protons are composed of two [up quarks](#) (each with charge $+\frac{2}{3}$) and one [down quark](#) (with a charge of $-\frac{1}{3}$). Neutrons consist of one up quark and two down quarks. This distinction accounts for the difference in mass and charge between the two particles.[\[35\]\[36\]](#) The quarks are held together by the [strong interaction](#) (or strong force), which is mediated by [gluons](#). The protons and neutrons, in turn, are held to each other in the nucleus by the [nuclear force](#), which is a residuum of the strong force that has somewhat different range-properties (see the article on the nuclear force for more). The gluon is a member of the family of [gauge bosons](#), which are elementary particles that mediate physical forces.[\[35\]\[36\]](#)

So, the gluons are what holds the atoms together, and, they will look like little 'sticks' or branches.

This means, of course, that the strong force and the weak force that holds things together, are all 'parts of electrons.' this electron thing is where energy comes from, so, will be making up the gluons and the strong and weak force too.

But, how do we see the difference between the strong and weak force? well, the less positively charged the force is, the easier it will succumb or 'give in' to the attraction, making it stronger or weaker as if it were reversed - big things have a weak force of attraction because they resist more, like an arm wrestle, yes?

Atomic radius. [empirical]



Originally Posted

by [http://en.wikipedia.org/wiki/Atomic_radii_of_the_elements_\(data_page\)](http://en.wikipedia.org/wiki/Atomic_radii_of_the_elements_(data_page))

The **atomic radius** of a *chemical element* is a measure of the size of its atoms, usually the mean or typical distance from the *nucleus* to the boundary of the surrounding cloud of *electrons*. Since the boundary is not a well-defined physical entity, there are various non-equivalent definitions of atomic radius. Depending on the definition, the term may apply only to isolated atoms, or also to atoms in *condensed matter*, *covalently bound in molecules*, or in *ionized* and *excited states*; and its value may be obtained through experimental measurements, or computed from theoretical models. Under some definitions, the value of the radius may depend on the atom's state and context.^[1] Atomic radii vary in a predictable and explicable manner across the *periodic table*. For instance, the radii generally decrease along each period (row) of the table, from the *alkali metals* to the *noble gases*; and increase down each group (column). The radius increases sharply between the noble gas at the end of each period and the alkali metal at the beginning of the next period. These trends of the atomic radii (and of various other chemical and physical properties of the elements) can be explained by the *electron shell* theory of the atom; they provided important evidence for the development and confirmation of *quantum theory*.

To find the radii [radiuses] you need to find the number of orbitals they have, and then, since the orbitals give it mass and identity as to which element it is, as you can find the element by knowing the orbitals types and diversity or amounts.

So, to find the radii, once again, you need to take the form of the matter and multiply the orbitals by 25 for a gas, 53 for a liquid, and 30 for a metal, or maybe i have the values incorrect, yet there must be a pattern.

To find how many orbitals the atom has, you need to find the

formula of the ancients, where they go up slowly then branch out into other areas, then advance all together until they reach eighteen, or my own formula where you take the atomic number, minus one, to the power of the atomic number.

Boiling points.

To find the boiling point formula is hard, there doesn't seem to be one, as, there is little structure on the table i am looking. so, where will we find a formula for boiling points?

I suppose we could take the mass of the material and find that the denser it is, the more heat is required to make it 'melt' or boil. what makes things denser but orbitals and type of matter?

So, depending on type of material, being solid liquid or gas, you divide those orbitals by the by half the orbital number, at the orbital number, or twice the orbital number, but i am not sure of the 'values,' really. i am sure that using the orbitals as powers, then dividing them, you will find the right boiling point.

Finding allocations of orbitals for elements.

Basically, the more orbitals a material has, the denser and heavier it is. it goes like this; hydrogen has one s orbital, helium has two s orbitals, lithium has two s orbitals and one p orbital, so, you take the atomic number of the element, and you can work it out if you have the atomic number. at some point, usually eighteen or thirty six, the orbitals stop adding and then they are just seen adding up on other types of orbitals.

So, if you have an atomic number of [x], then you have to use it like 'powers' to find the right amount of orbitals, bearing in mind some stop 'leveling up' at certain points, but not at other points. simply find out how much by using the power system [s1, s2, s2 p1, s3 p2...] and then cut off the excess over the limit of how many they can be.

What are orbitals and what do they do?

Orbitals are electron clouds, or, bunches of electrons that 'float' around the atom. they basically will make things bond to it, or push away from them. they also 'get eaten' by protons, the difference is said to be the difference between a basket ball and a pinhead. these protons will have the electrons travel right through them, and i suppose they go in opposite directions. actually, one of them must go clockwise and the other anti clock wise, and, i am told, the electrons go clockwise.

In nature the earth goes anti clockwise around the sun, so, this must be the 'closing the gap,'

yes? to do the opposite would be what electrons do, going clockwise [i hear] and the proton, on a collision course with them, goes anti clockwise. this means, of course, that electrons are using their negative charge to create energy, and protons are keeping the energy from spiraling out of control. this means that the protons must have a positive charge, as, they are attracted to the electrons.

Molecular cell biology.

This is where the cells of living organisms are studied and analyzed. if we were to think of what a cell does, it is a combination of various elements or atoms. this means, of course, that cells are like little things called oxygen or lithium or zinc. when these things come together, they make a cell and there may be a complicated formula for finding what is in each cell. cells make up genes, among other things.

So, if you want to know what is in a cell, or what you get when you mix atoms, you need to look at the formula for it. in biology, the most common cells are made up of carbon, oxygen, hydrogen and nitrogen. you must learn everything you can about these to become a doctor or chemist!

If you were to be given a formula of CHO_4 , you would see that there is one carbon atom, one hydrogen atom and four oxygen atoms. this is easy so far, right? i mean, i don't know what the hell it is, but we know what it is made of!

Now, if you look at some carbon dioxide, it is spelled CO_2 , so it has one carbon and two oxygens. any time there is a O in it, it changes to oxide, as then it is an air 'thing.' there are a few other air things that also make it oxide, like N [nitrogen], H [hydrogen], O [oxygen] or anything else that ends with "en" or "ne," okay? then it is called a 'oxide' at the end.

If you are to take a liquid, then they would have one of those en or ne types of things in them. the rest are metals.

So, if you were to observe that atoms need to come together to form cells, and atoms by themselves will not affect anything like our world, we would have to say that cells are the building blocks of life.

If you were to want to know what the formula means - what cell is represented by the 'code' - then you would have to observe that no metals can ever be part of any cell of fluids or gases, and no gases could be part of any fluid cell, as then the cells would be mixed up.

So, if you were to have some idea of what the cell is, you could definitely answer that it is a remembered word that features all of the elements in it.

so, NHO could be nitrogen + hydrogen + oxygen, making it an oxide, of course, so it would be 'nitrogenhydrogenoxide.' if you answer that, they will definitely give you the marks.

I think one of the biggest let downs in the science scheme, is that people do not feel comfortable with the terms used, being Latin or some rubbish. it took me a full year to work out the difference between a particle, a lepton, a meson and a cell!

Of course, the best thing to do is to make them aware of these things first, that is what i would suggest.

Terms used - a mini map?

Right, so, we got a lot of terms to learn for maths and science and anything technical. the good news is that you won't really need to know the terms after school, so i don't know why they make such a big deal of it now, but, the system must be followed, so;

In maths you get a few terms to learn. the good news is that you don't need to know all of them, just the ones you learn over and over. of course different people have different ways of learning terms, and, it always goes through association. this is true since being a baby - big hairy face means dad, big kisses means mom, yes?

In maths you get [1] algebra, [2] quadratic sums, [3] functions, [5] calculus, [6] trigonometry and of course [7] logarithms. i guarantee you that is all you need to know to pass your end of grade 12 with about seventy percent - the mark needed to do nearly anything, and, i am sure you already know what those are! if you followed my guidelines or basics on everything i have written lately or this year, then you will be able to do all that easily. you do not need to learn the in between rules, as, i have shown you how to work it out without these rubbish rules.

Now, for science! basically, you have something big you study into it's smaller parts. you start with a [1] planet, a person or a plant or building, then you go down to [2] limbs and bricks, then you go down to [3] organs and sand or something. after that there are [4] cells, [5] atoms and mesons [6] particles called leptons and baryons and so forth. most of what you will work with are atoms. this is mostly chemistry, as you will be working with these things throughout your science career, either building them up, or, building out of them. cells are of course collections of atoms or elements and are mainly what those 'pictures' are about. cells are the most important thing to understand here, or, bonds.

Now, if you want to do engineering or i.t. or something technical, you need to link them up! this is the best way to learn how to do things. if you were to observe that a computer is a base, or a car, or a building, then you have your goal. everything is 'goal oriented' as there must be a goal for the thing you are doing, or, it won't be based on an 'outcome.' this is a 'result,' or, 'end.'

So, your end is the computer, car or building? to get to the end, you need to build it like with lego, okay? so, you need to start with the smallest things first, well, the smallest that you can get. like those little round bits, the 'buttons,' those are like transistors, resistors, screws, cells, 'cement drips,' those are the smallest thing you need to know about. cells remember are those pictures of the H to the O and sticks going all over the place, okay?

But, what about our goals! we need to know what goes where to make it work, so, we need to first observe the things - what fits where? i am not expecting you to right away go out and design parts, but it would be nice, but rather to just put the things together. to design parts you need to do maths, as i mentioned, and it can be stressful, as it is 'finicky.' i mean, if it were easy to make new parts, everyone would do it, yes?

If it was that you wanted to put together a computer, first you need to get hold of the plans. this is simple, as the plans come with the box, yes? ask your dad if his car comes with a manual, ask mom if there are 'television standards' around, and look. do not open it up, as it might fall to pieces. if you need help with this thing, ask dad or mom to buy you a cheap radio, take the batteries out and unplug it. then use a screw driver to open it up, slowly. write down where all the parts go, and see if you can put it back together, after observing the parts of it inside. there should be a board with some little black things on it, this is like a computer's mother board, this is like a car's engine, this is like the electrical wiring of a building. hell, this could be like the person's heart! then you need to remember where the patient's parts go.

If you want to be a doctor - i hate working with blood, but hey, you might? - all you got to do is make a little cut on a mouse, observe where the blood looks bad, like a different color, replace the veins and cut out the bad parts - there are things for putting it back together you can get from the hospital - and then sew them up, making sure there is no more bleeding beyond a little bit. voila, you are a surgeon, yet a basic one! that little mouse, that is dead, will have a fully working body - if you were to plug them into a very low energy thing with dad's help, you will feel their little hearts beat!

So, we are putting together a computer, yes? if you were to look at all the 'transistors' on the 'board,' you will find that all they do is go on and off. if you were to observe that when they go on or off they will be setting things up for the next thing to go on or off - like a bridge for a ship that is open or closed, yes? - then they will allow different parts energy, just like a person, car, computer, radio, or cement for a building.

Now we know how stuff works! if you want to know more, just keep reading. it is easy to be an it guy if you know medicine, or an engineer if you know chemistry!

What about particles? what holds atoms together, how?

If you were to take the particles from a atom, well, all atoms are made of particles. this means, like that guy on the television jimmy neutron, he is supposed to be obsessed with neutrons,

which are like the core of the atom. this holds all the things together for the atom to function.

If you were to look at the other particles, well, you have, among other things electrons, of course, and photons and quarks and stuff.

They are held together the same way the earth and other planets revolve around the sun. if you have something with mass revolving around something else, well, if the electron stopped bonding with other particles, then the neutron would fall out, so it is like one of those tennis balls on poles, yes?

So, if you were to want to look at all the things that hold a atom together, well, everything must have mass, so slap that stupid teacher that tells you that photons do not have mass. no mass means no energy, and no energy means no movement, yes? so, everything sucks with a negative spin, and everything with a positive spin gets sucked. this means, there needs to be more things being sucked than things energizing the atom so they will stick together. but, why?

I guess it is about the energy of the electrons and leptons being negative - not only do they suck, they take things away from the atom by 'burning' it, just like a fire. this fire will move along the whole thing, making it full of energy, but, it needs to have mass to 'burn.'

What holds the orbital clouds closer together is that they will be looking for something to annihilate, as there are a lot of them, but, being polarized - similar things repel each other - they will keep each other at bay. but, then again, hydrogen only has one orbital, so, what gives?

If you were to see an electron spinning around the neutron, then it is moving so fast it cannot come closer. how come? because it is pushed away by another electron on the inside that is kept in check by the proton, and, i suspect this keeps everything in check.

Now, if you were to observe the burning of the electron, it burns other things into connecting, as, you know that heat will bond a plastic pan to a stove, yes?

That is how and why the atoms are kept in check.

THIS IS WHAT YOU NEED TOKNOW TO DO MAGIC BASICALLY, OKAY?